

PRIOR ART

FIG. 1

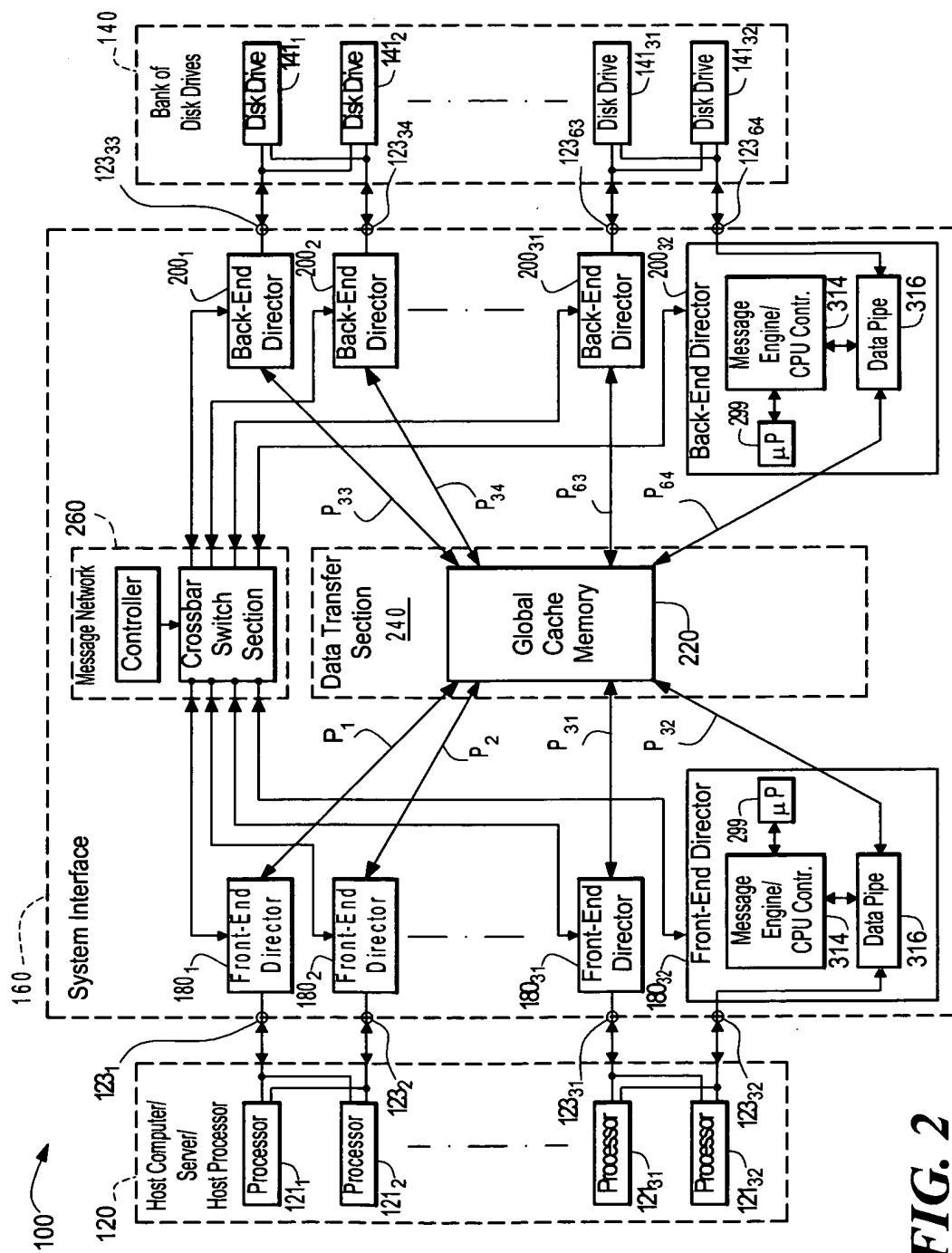
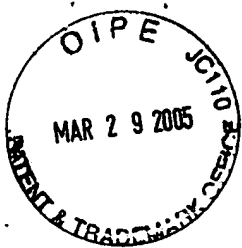


FIG. 2



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FIG. 3

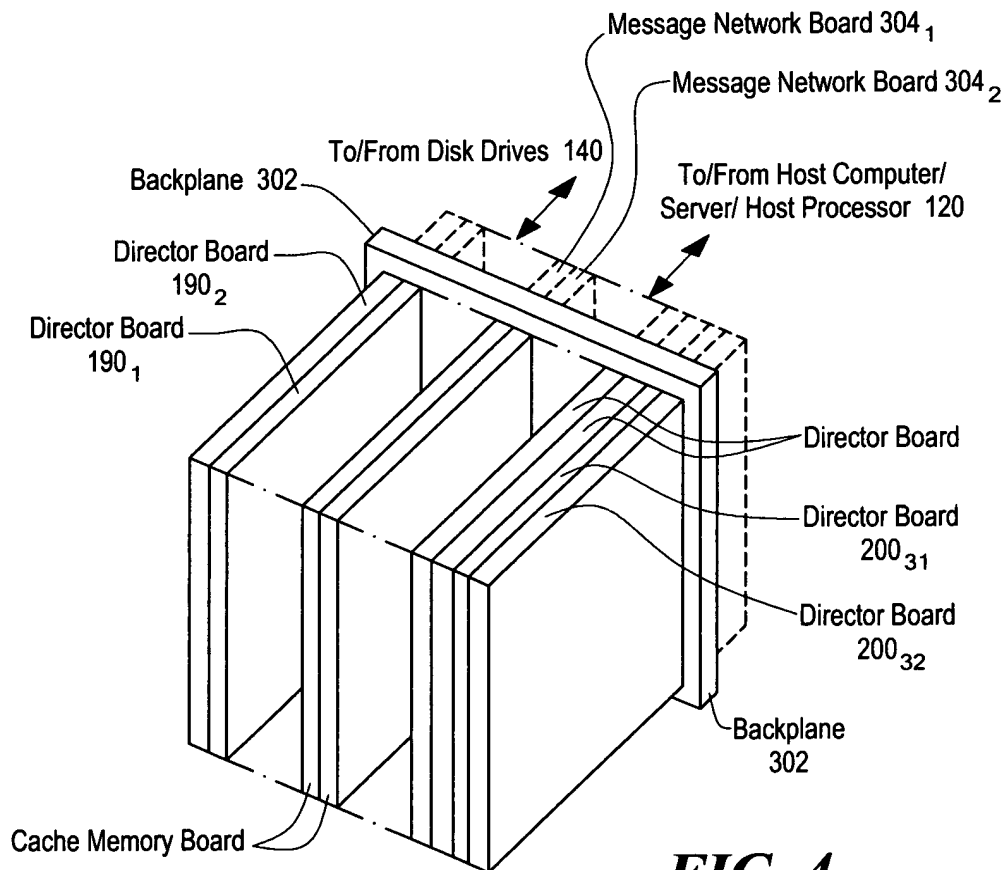
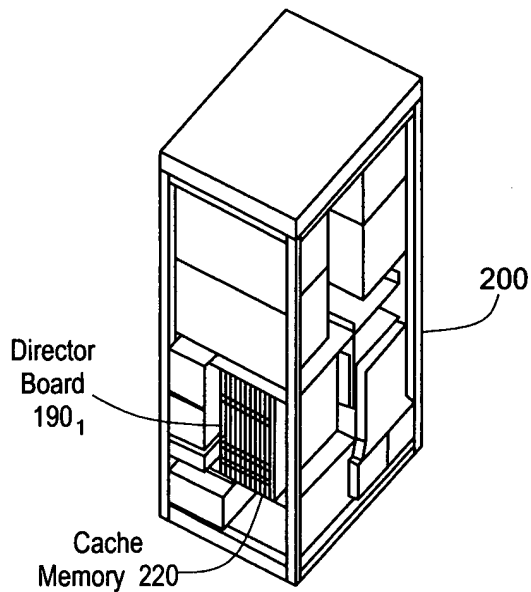


FIG. 4

FIG. 5

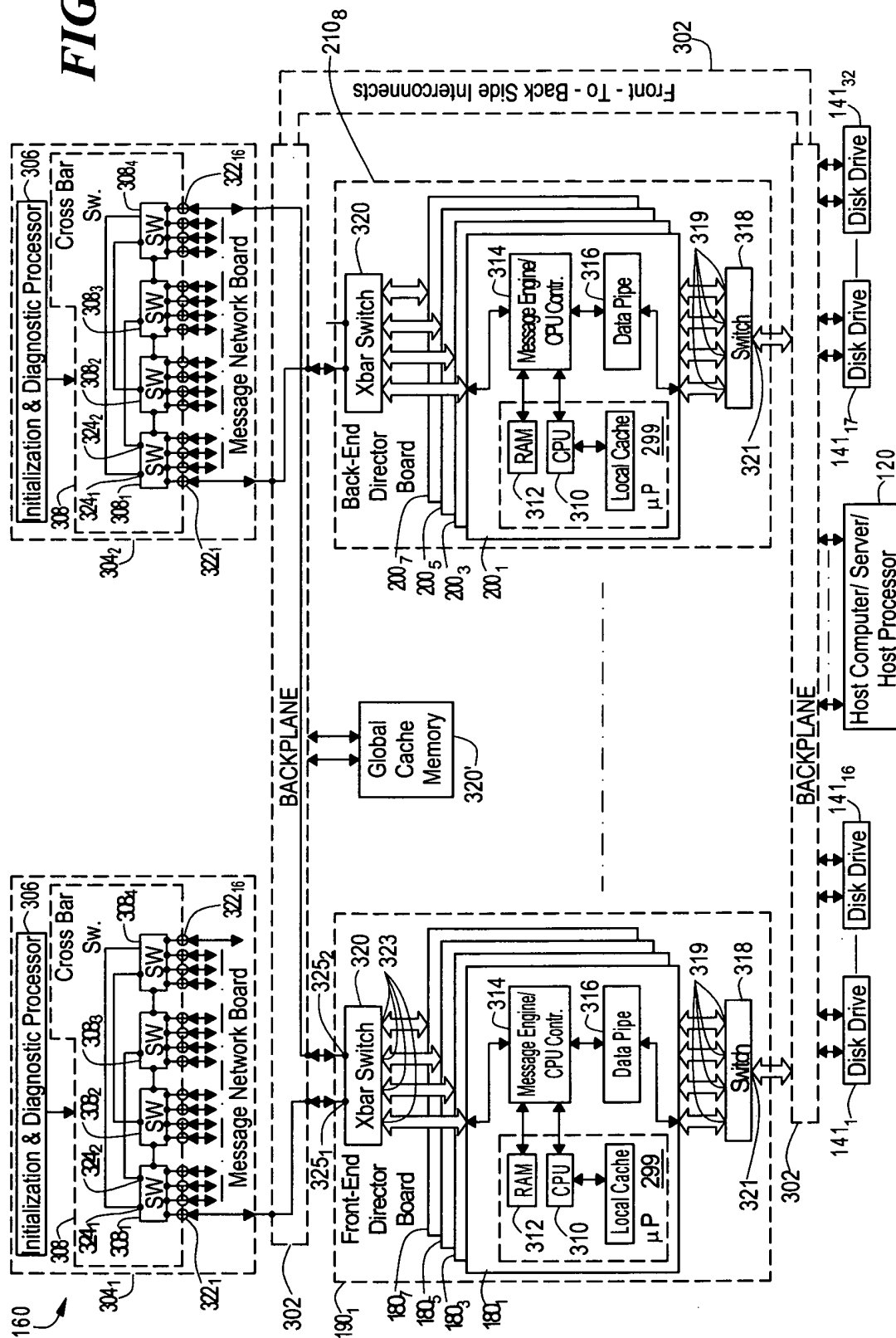
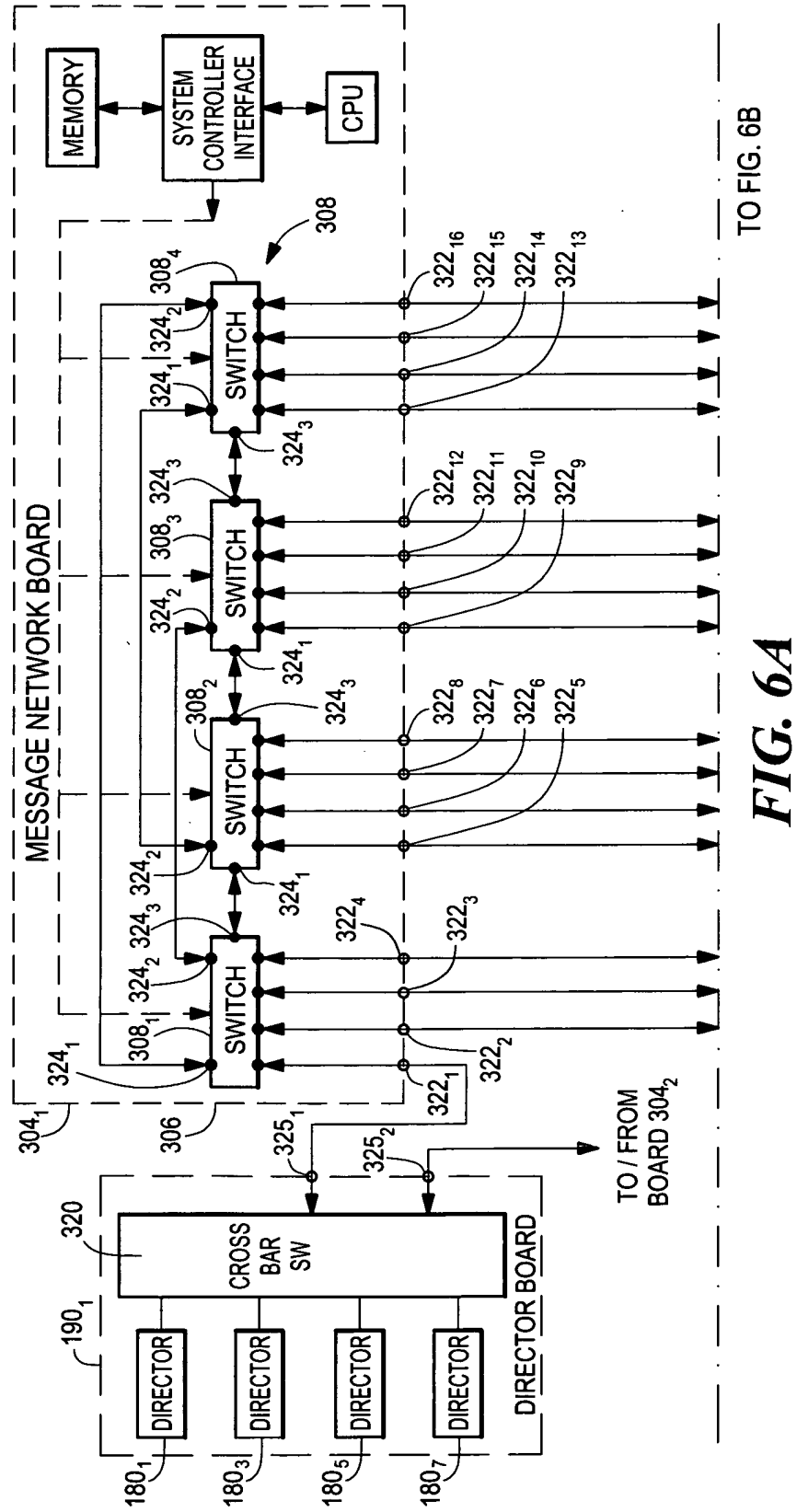
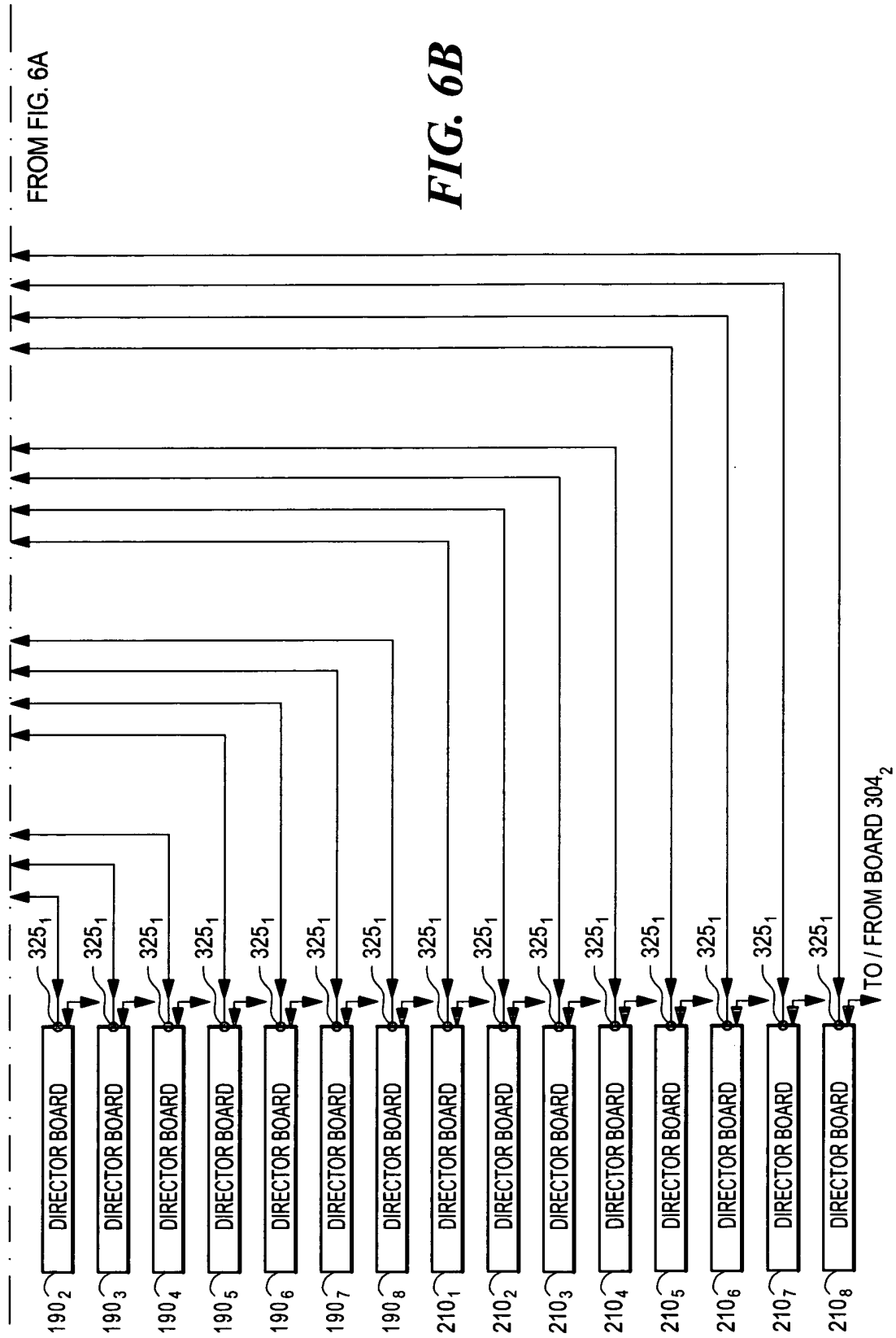


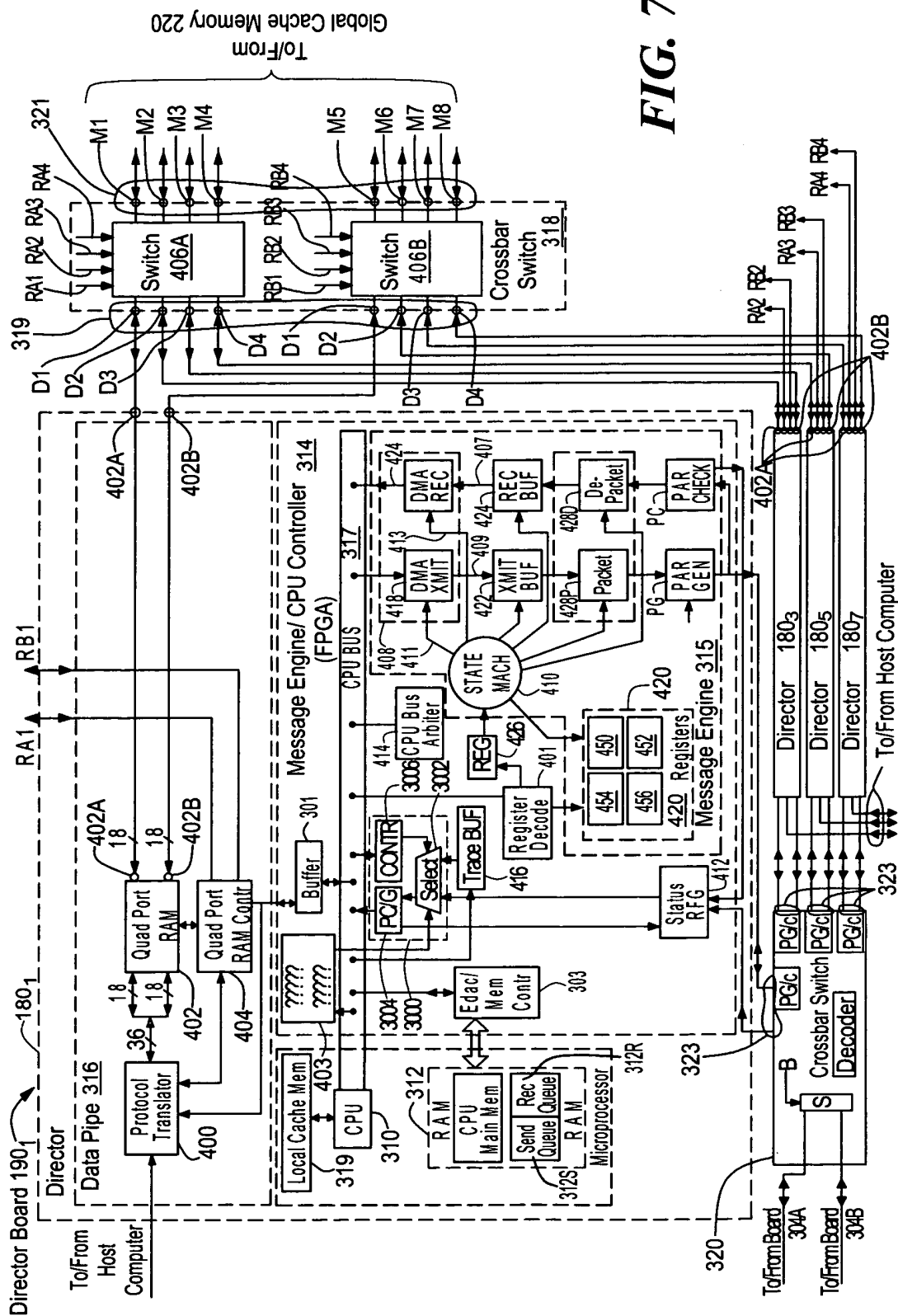
FIG. 6A
 FIG. 6B





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FIG. 7



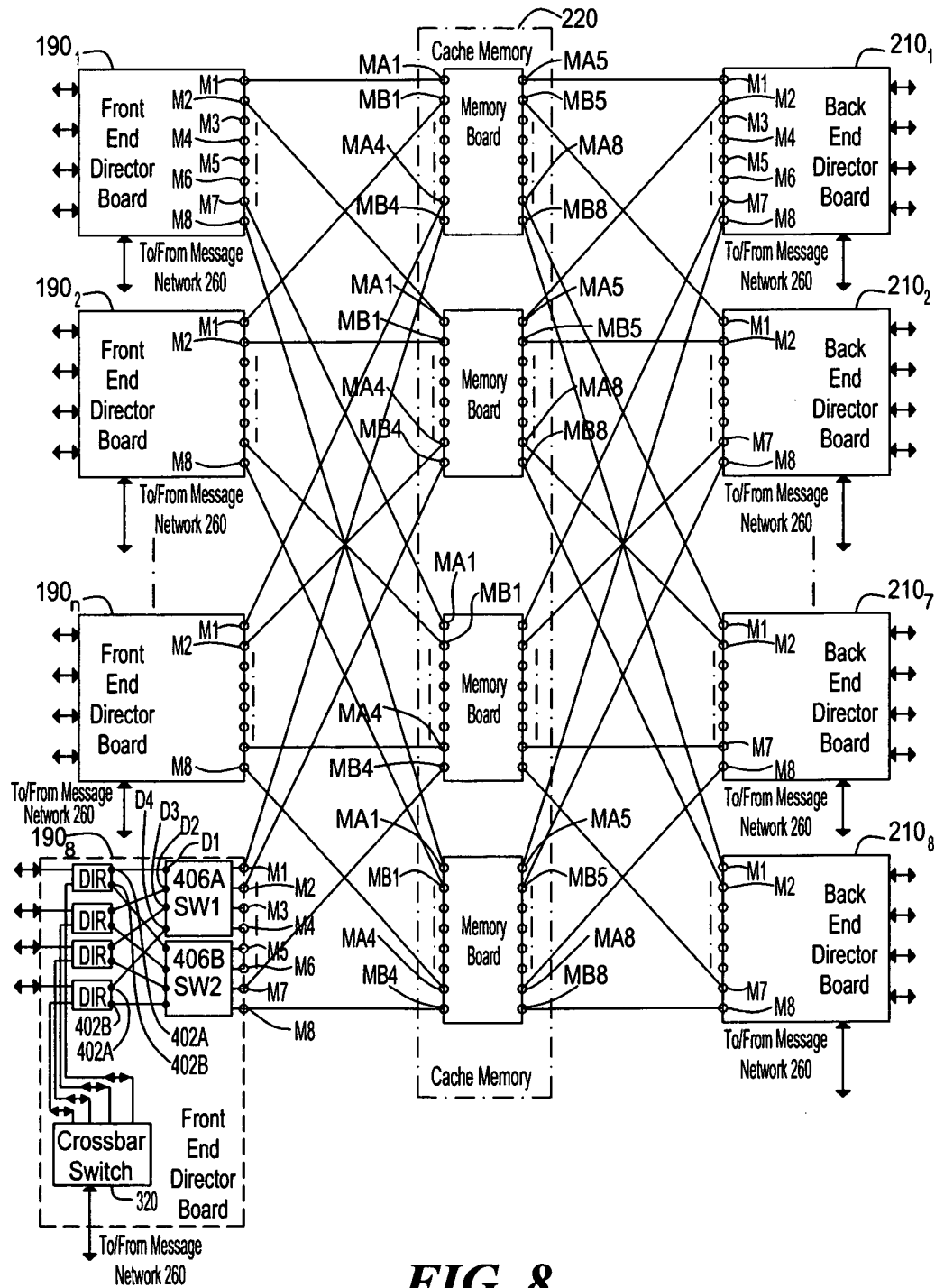


FIG. 8

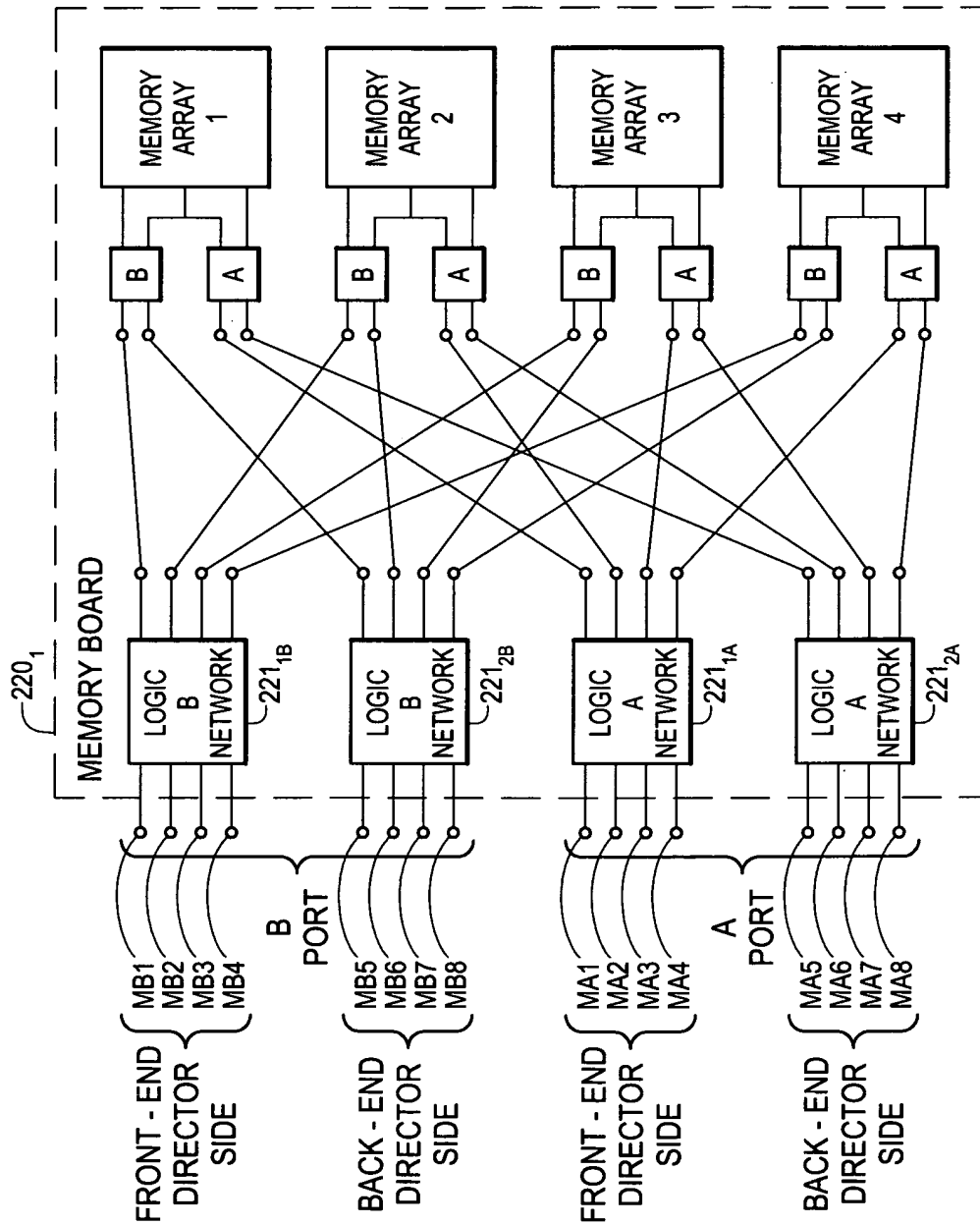


FIG. 8A

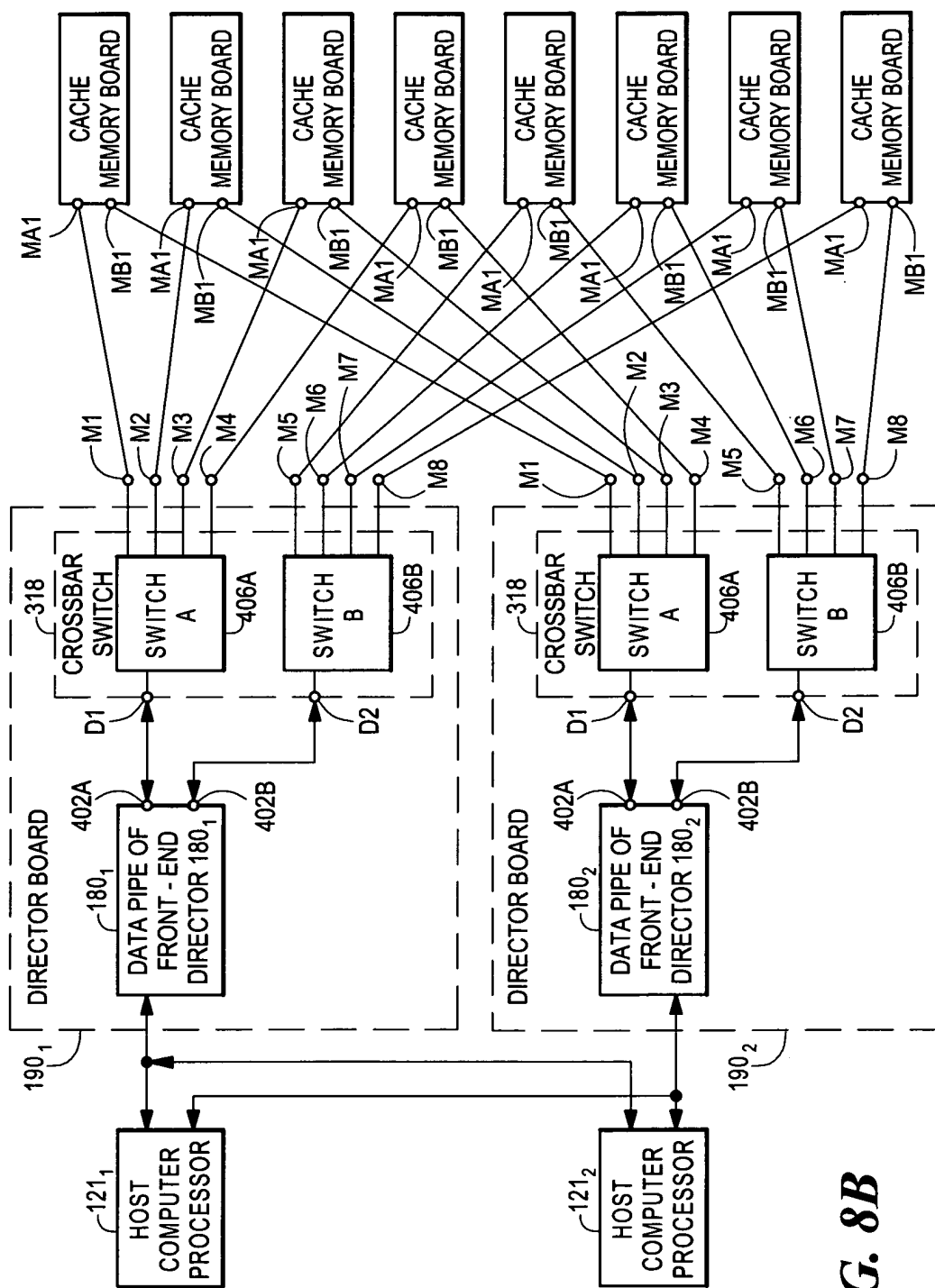
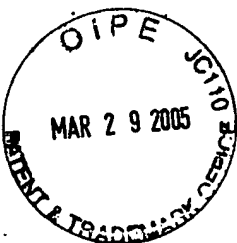


FIG. 8B



FIG. 8C

FIG. 8C-1
FIG. 8C-2



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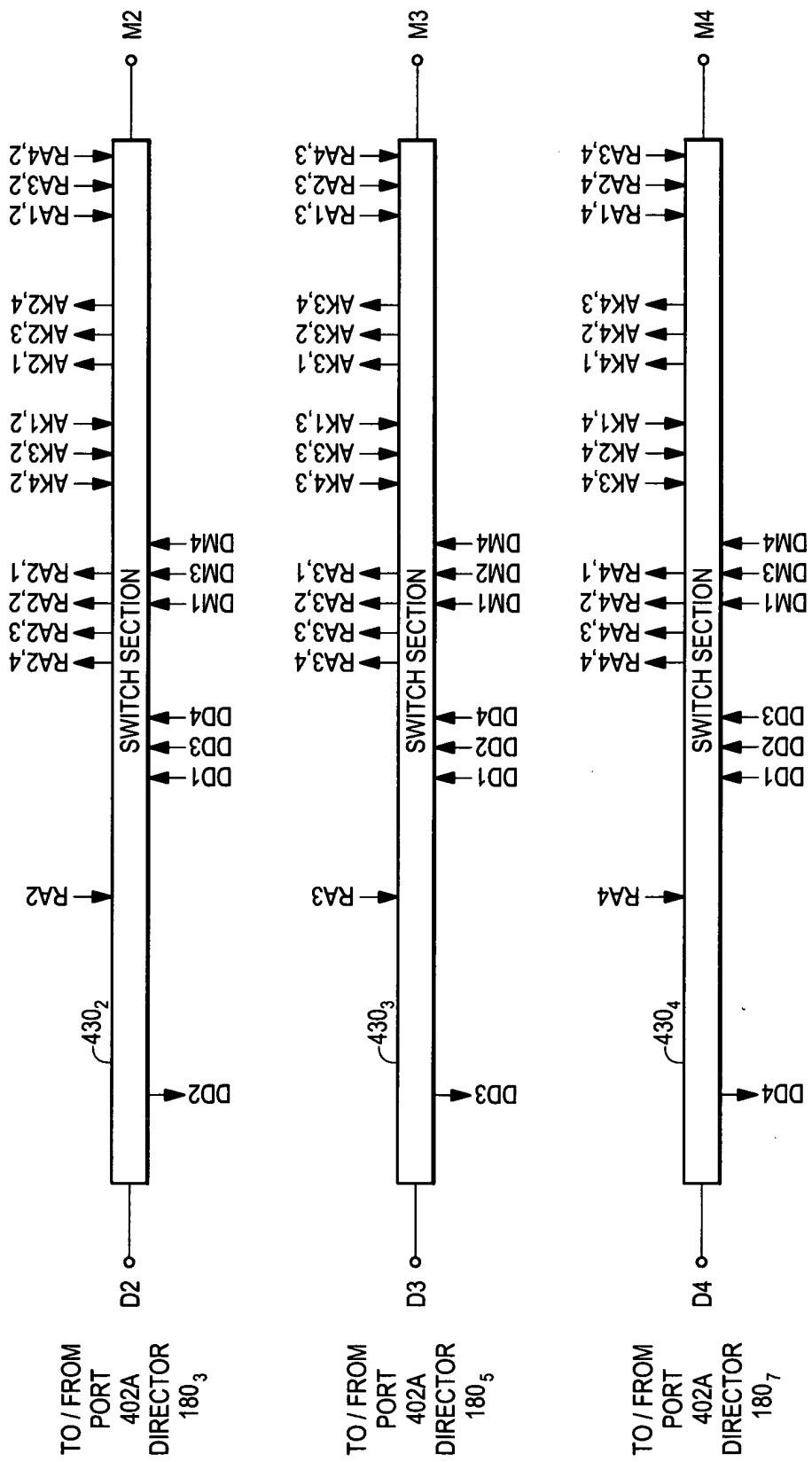


FIG. 8C-2

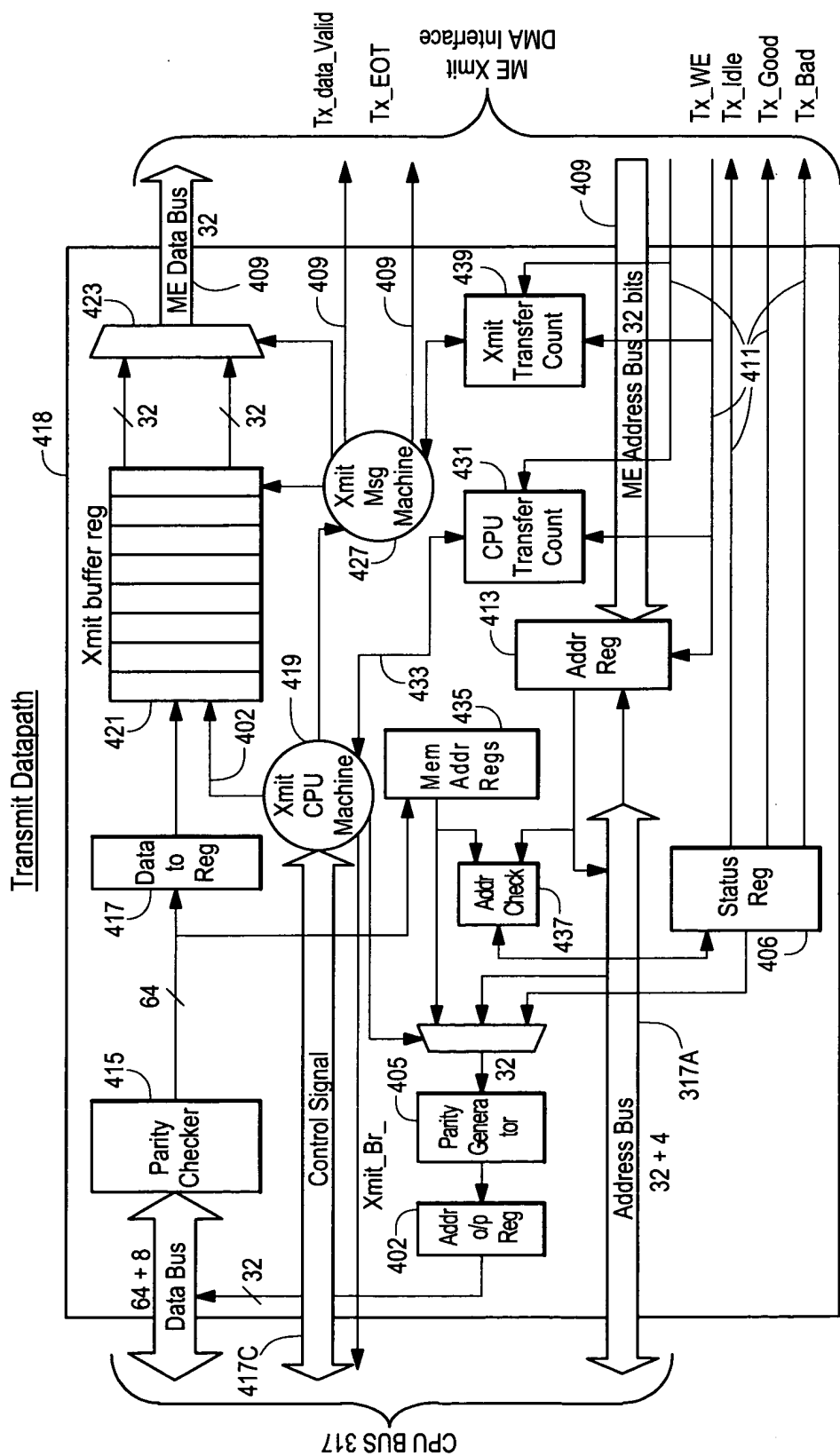


FIG. 9

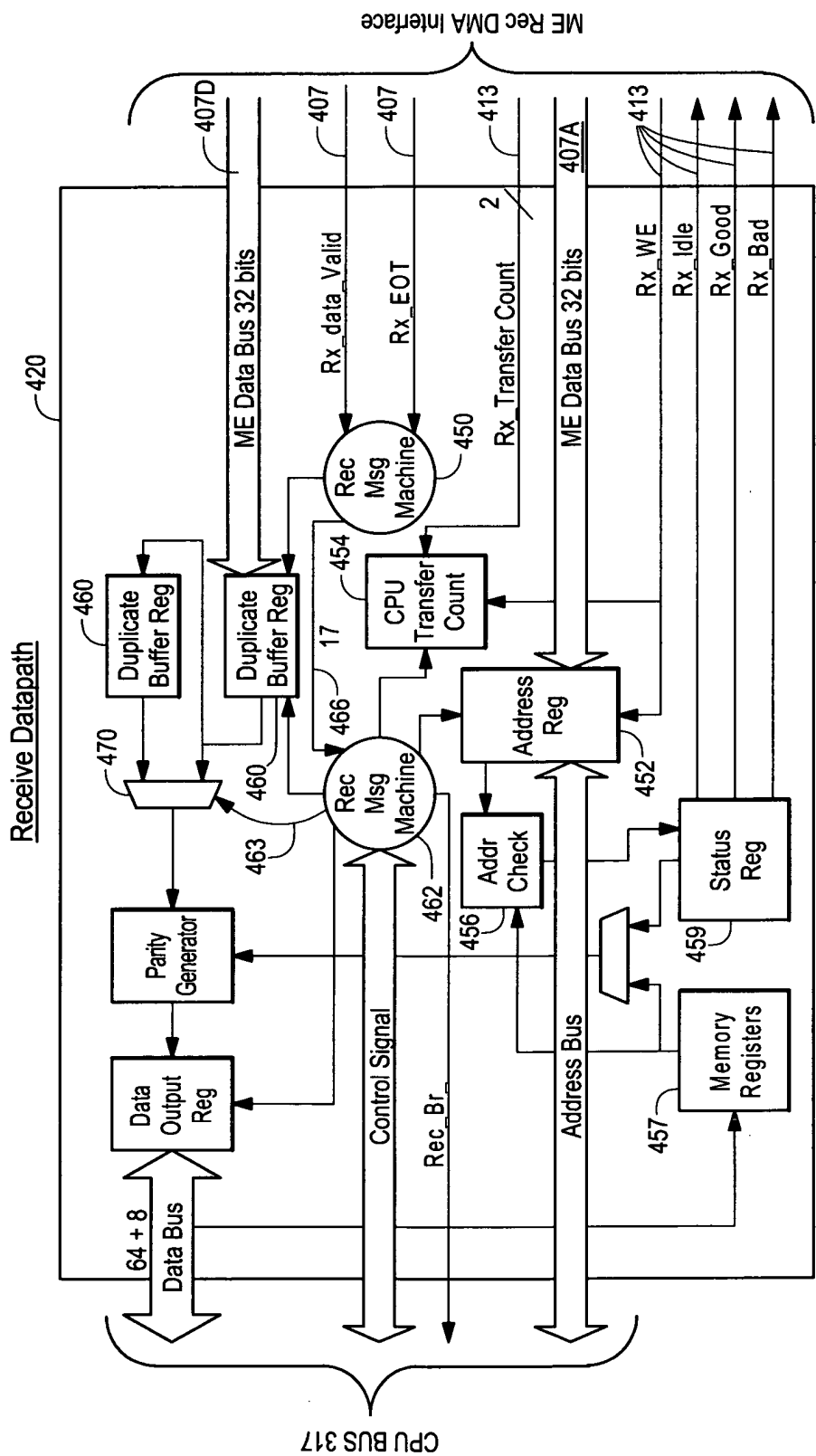
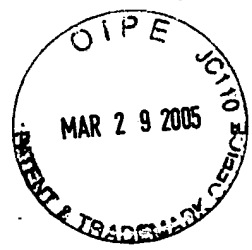


FIG. 10



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FIG. 11A
FIG. 11B

FIG. 11

Message Bus Send Operation

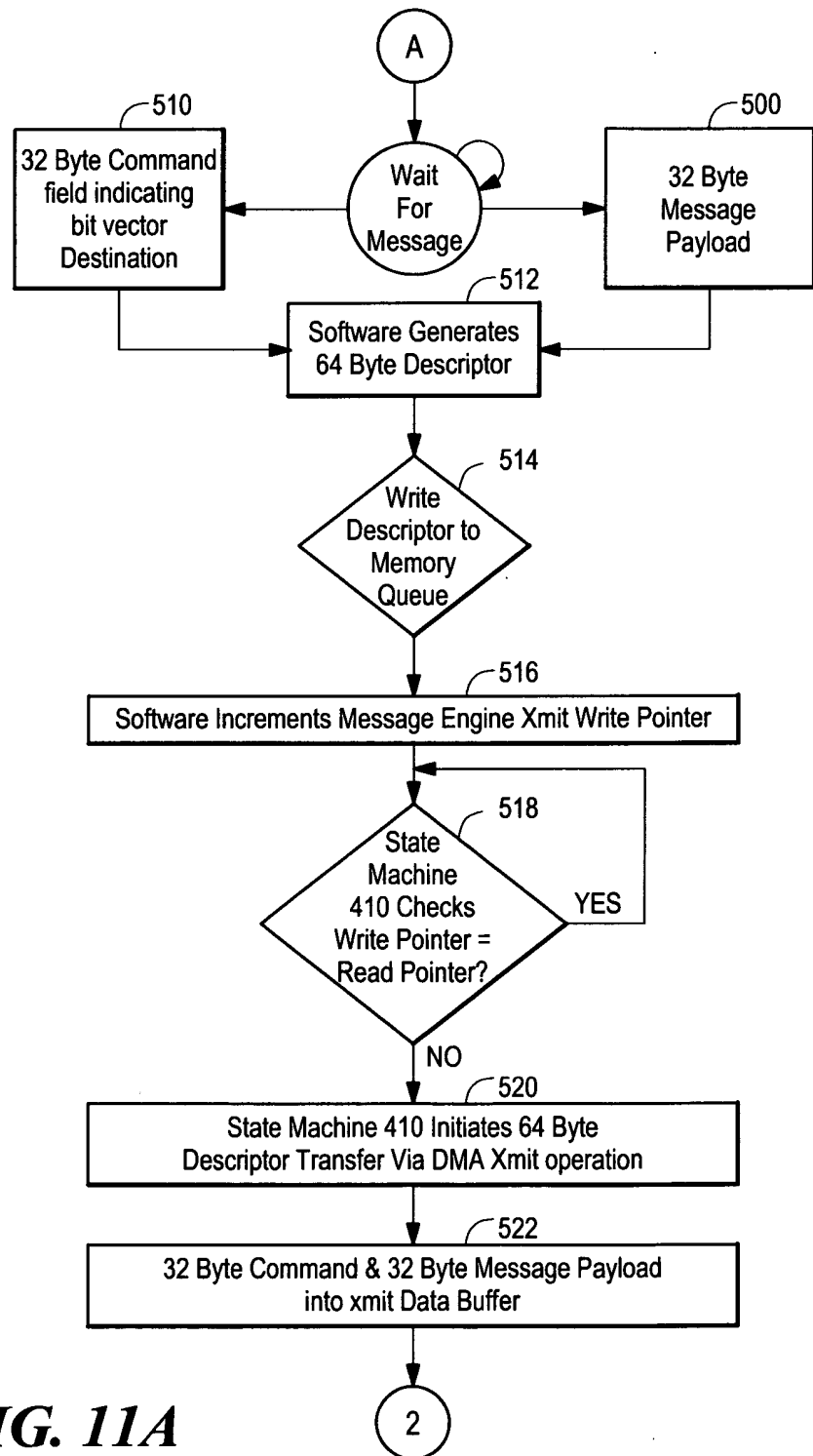
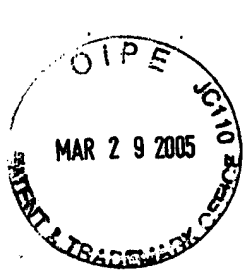
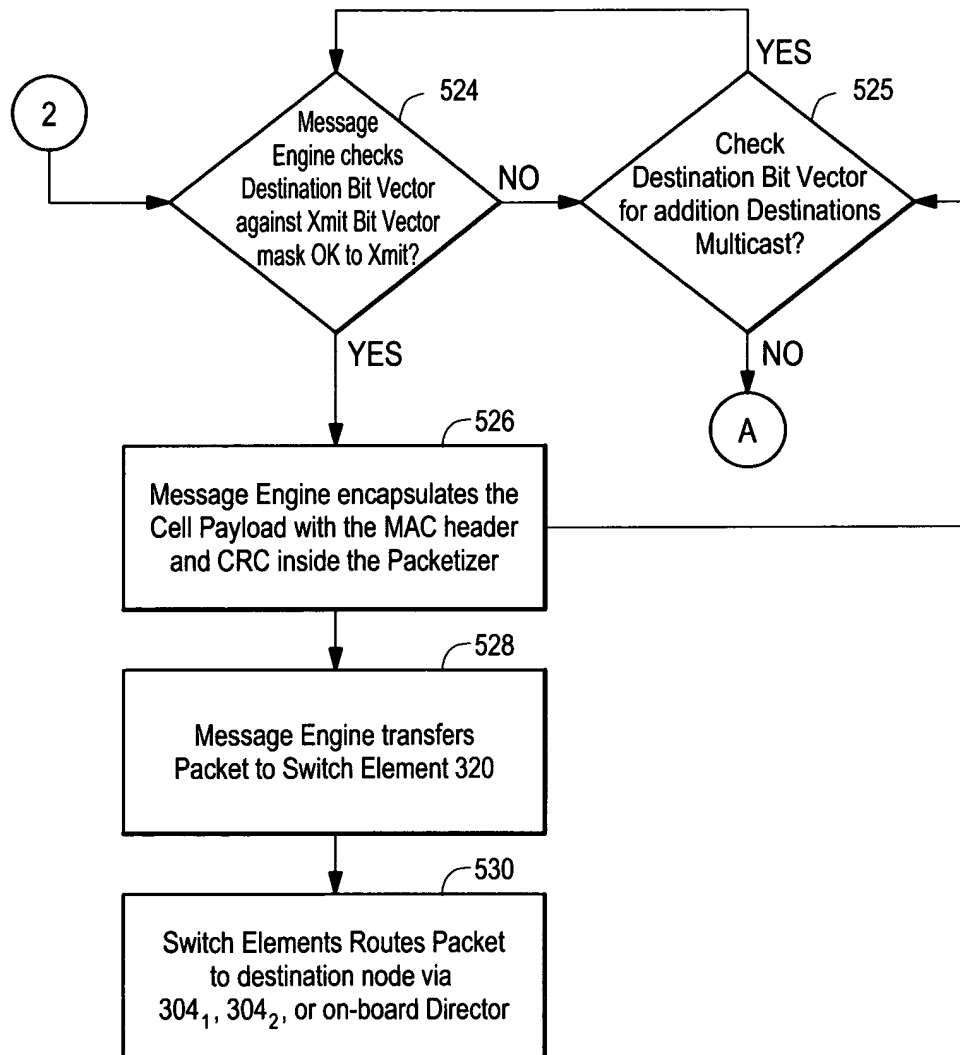
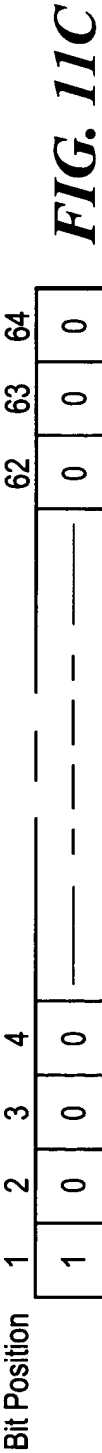
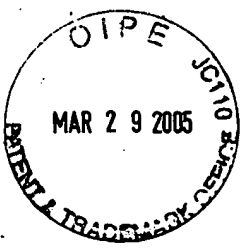
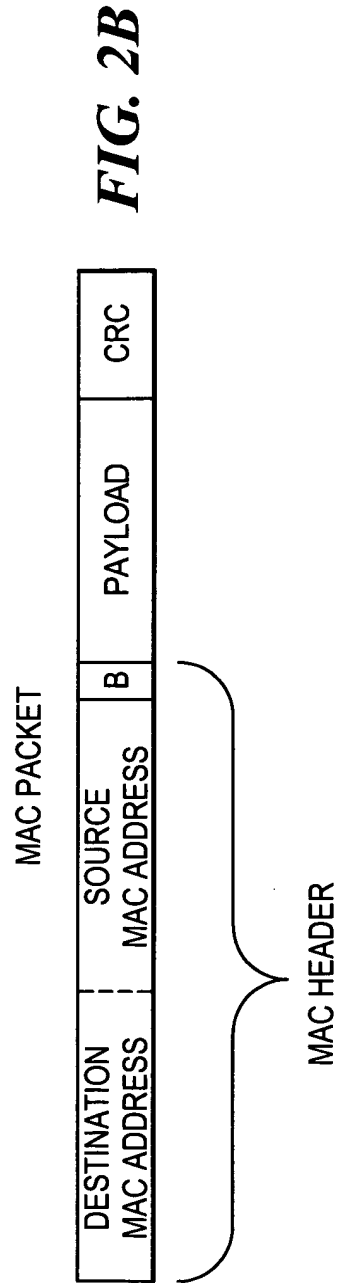
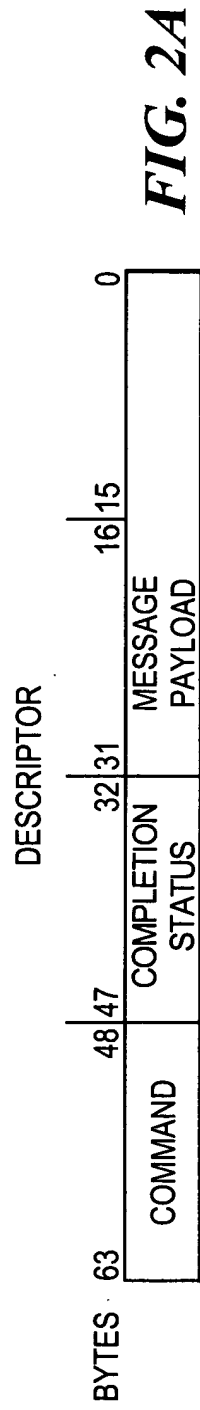
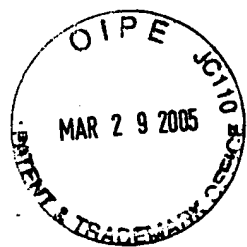


FIG. 11A

Message Bus Send Operation Continued**FIG. 11B**







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FIG. 12

FIG. 12A

FIG. 12B

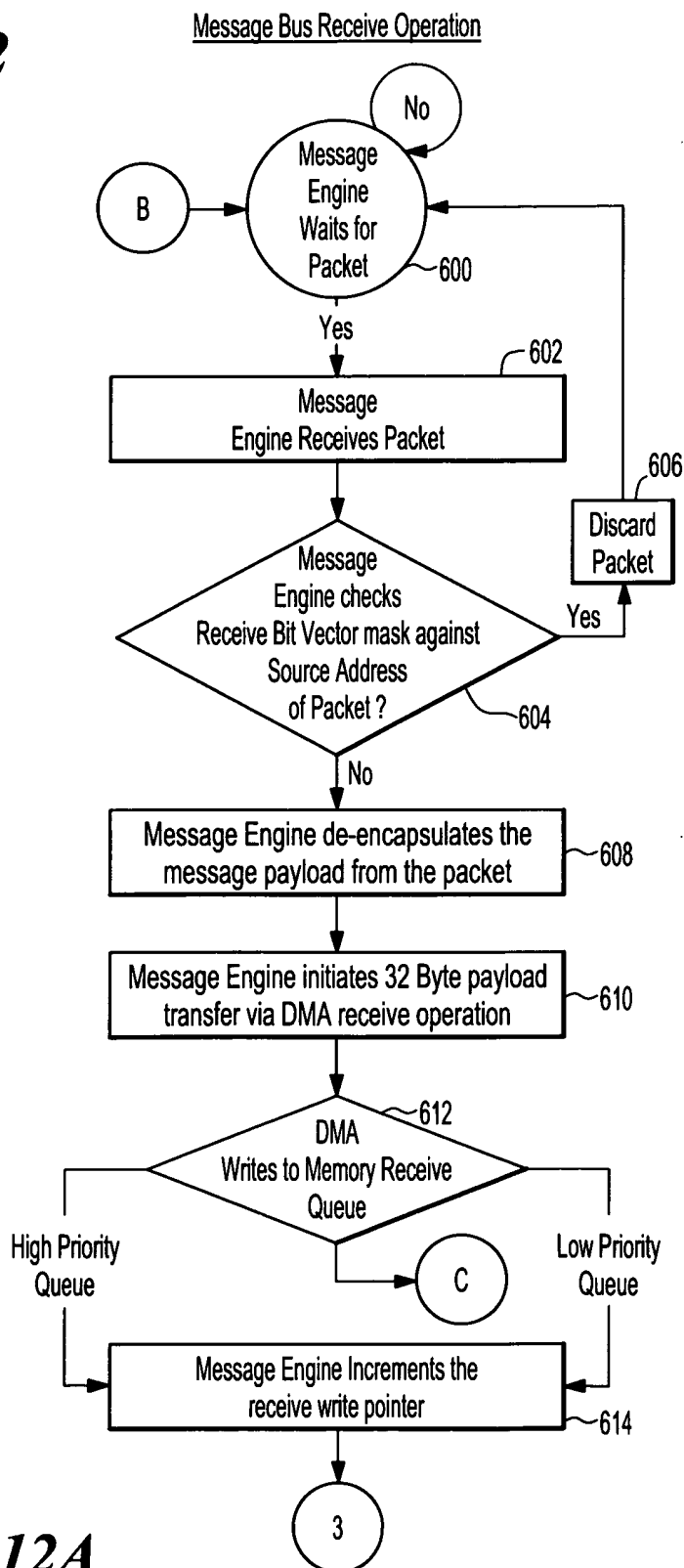


FIG. 12A

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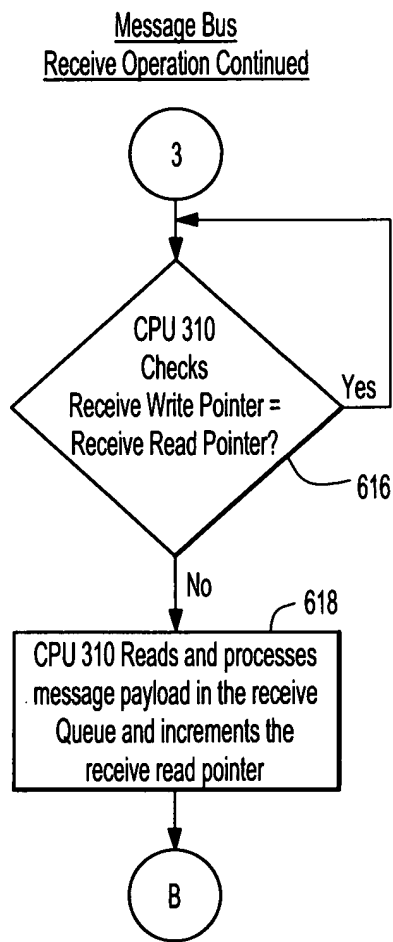


FIG. 12B

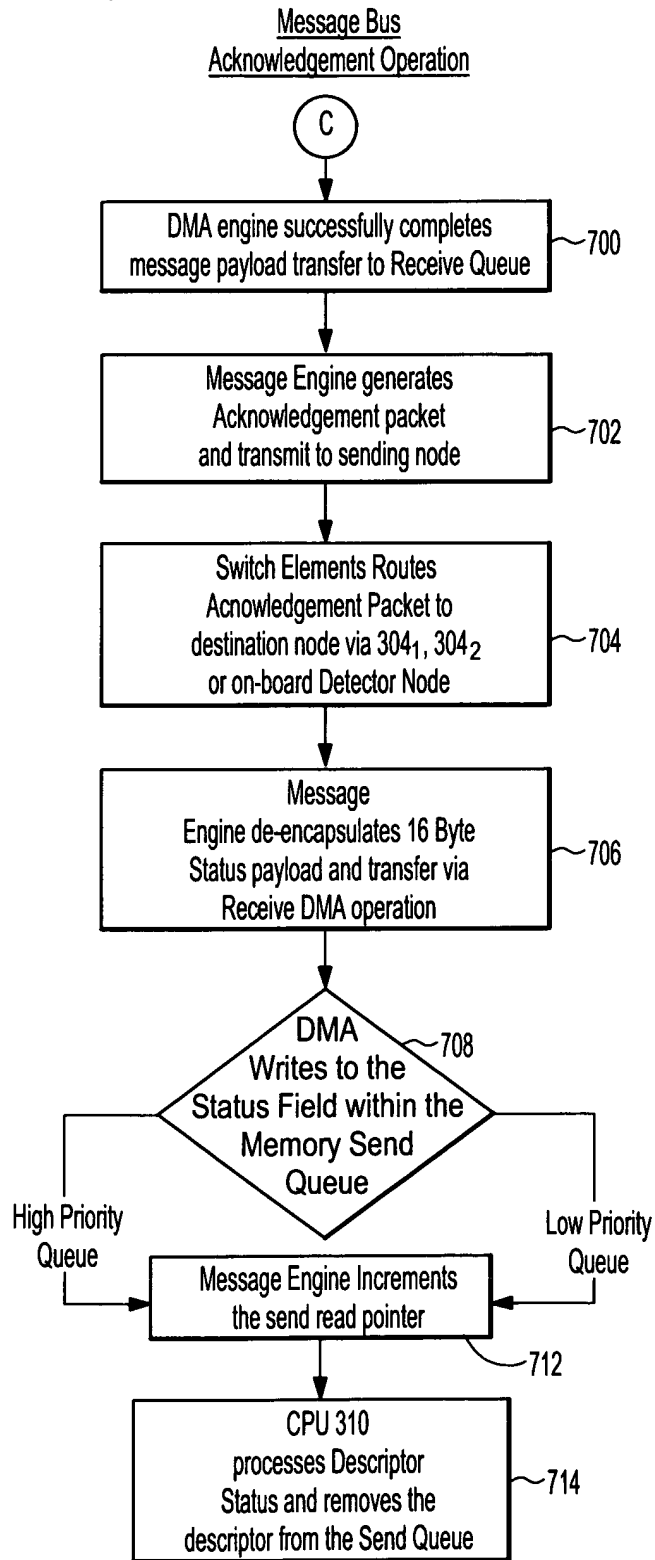
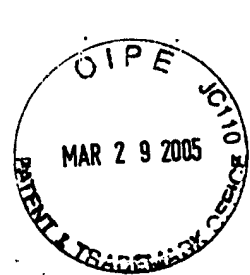


FIG. 13



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Xmit CPU flow

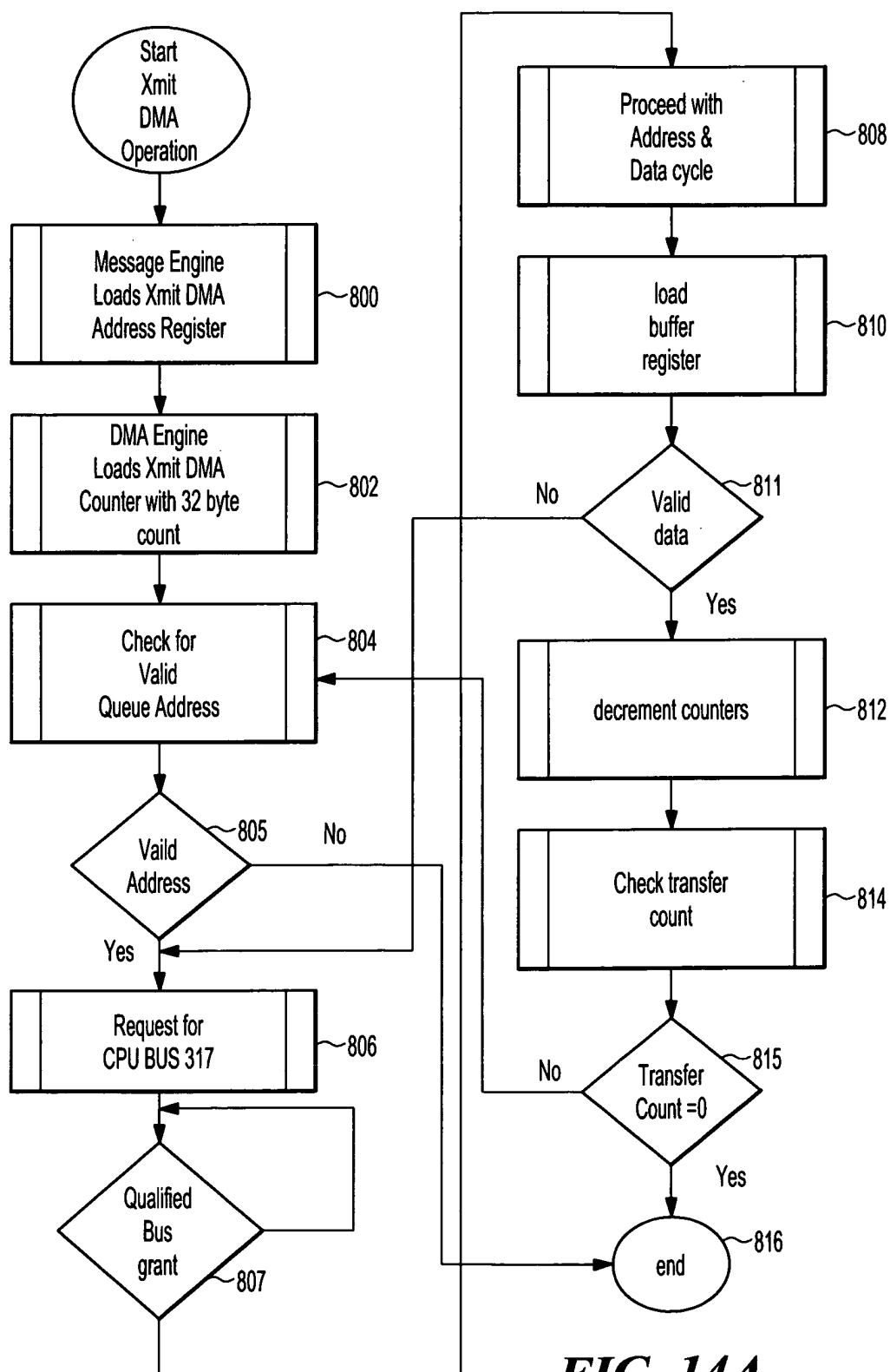
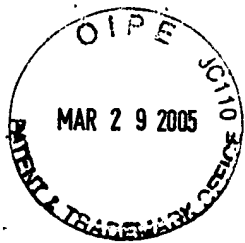


FIG. 14A



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Xmit Msg flow

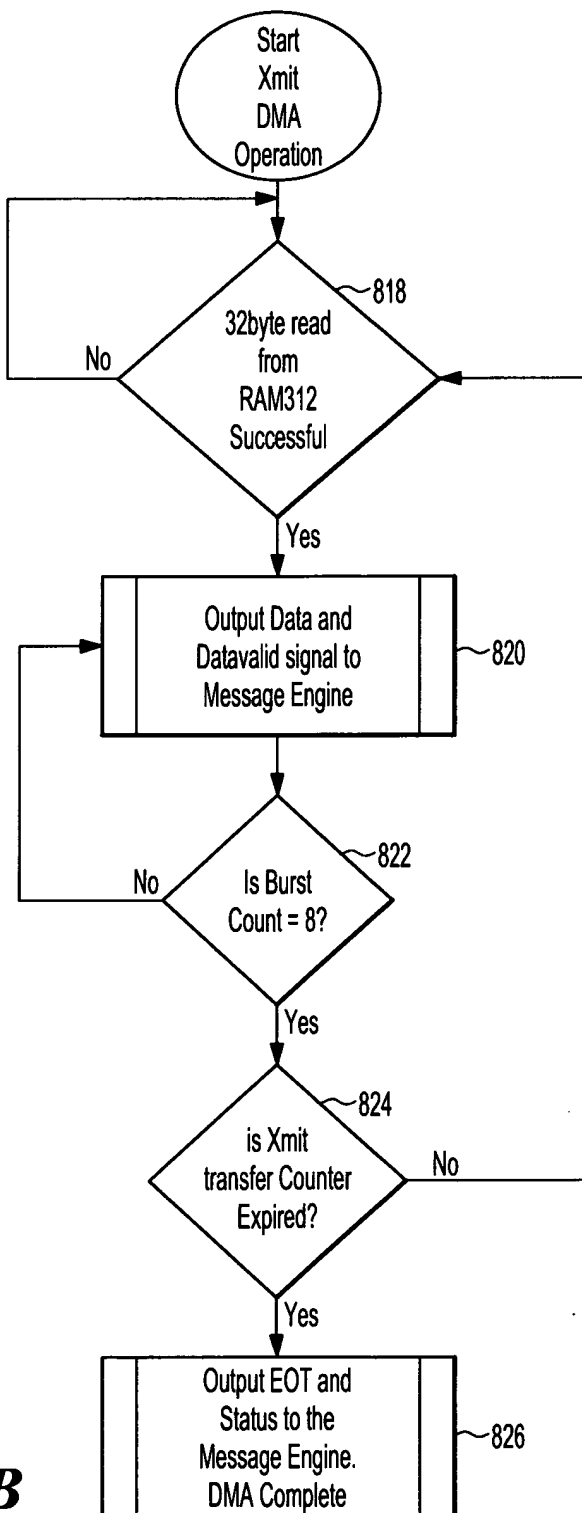


FIG. 14B



Rec msg flow

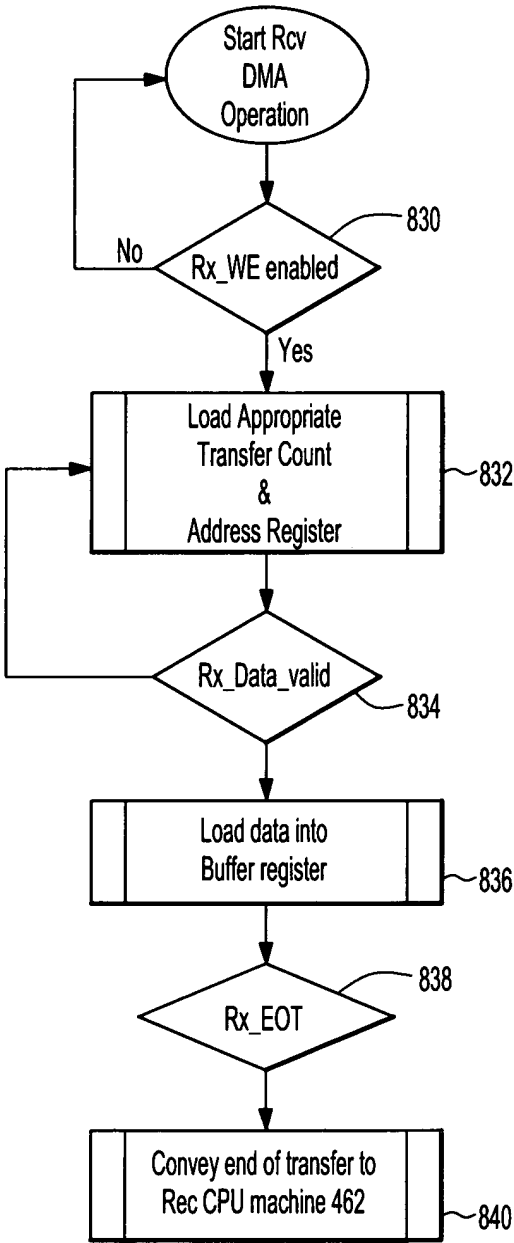
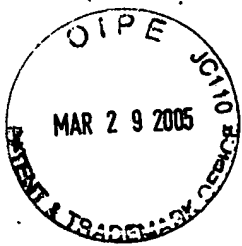


FIG. 15A



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Rec cpu flow

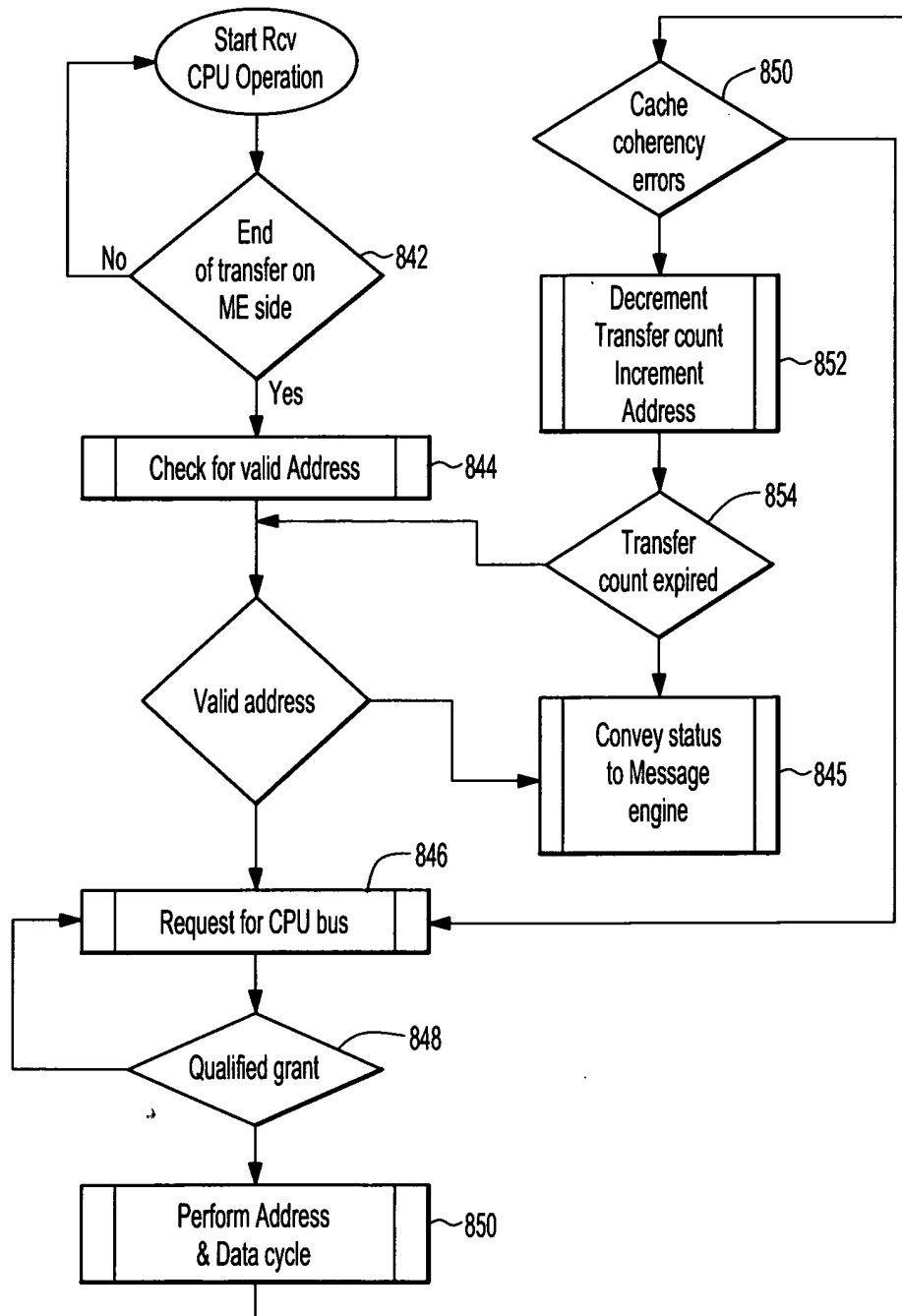


FIG. 15B

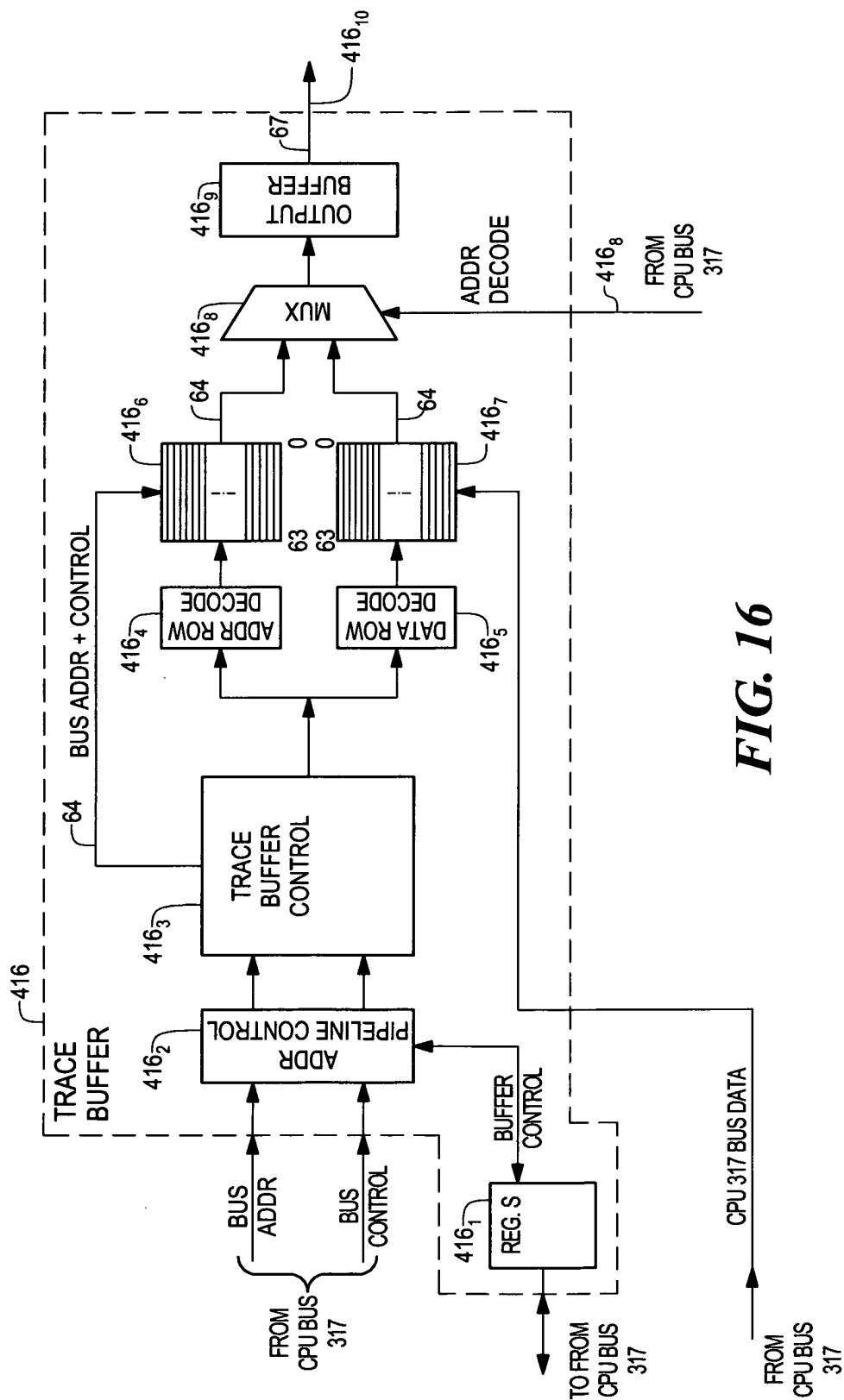


FIG. 16

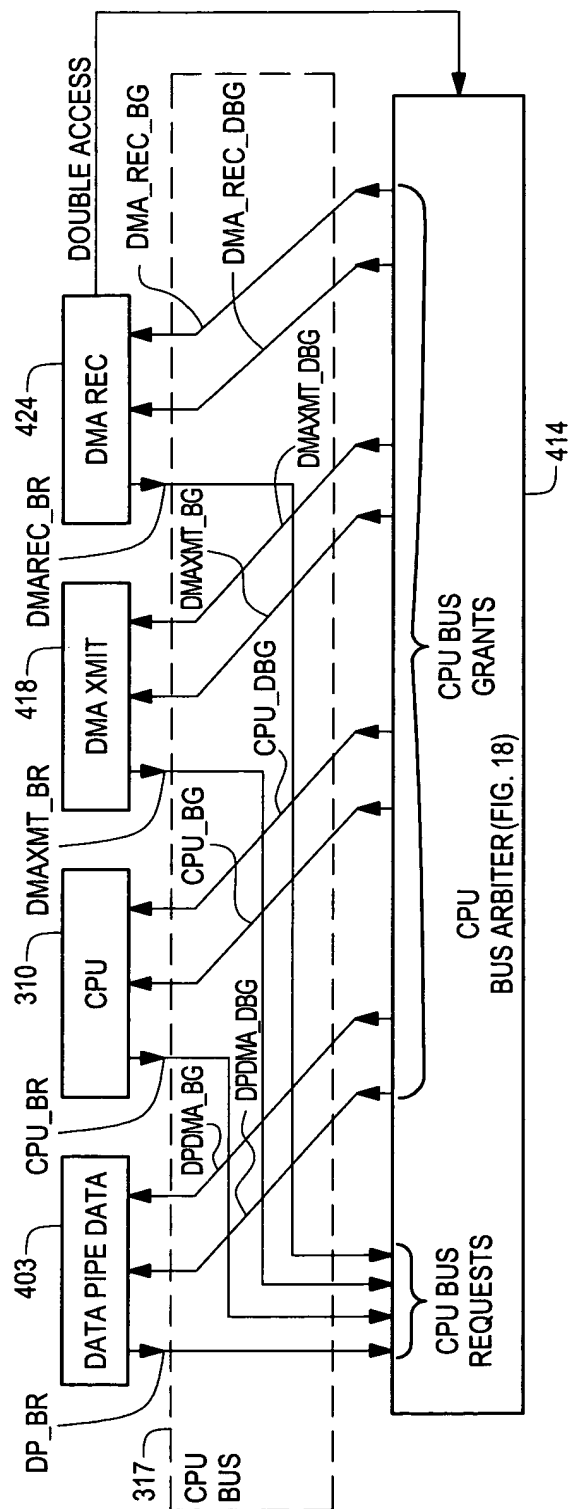
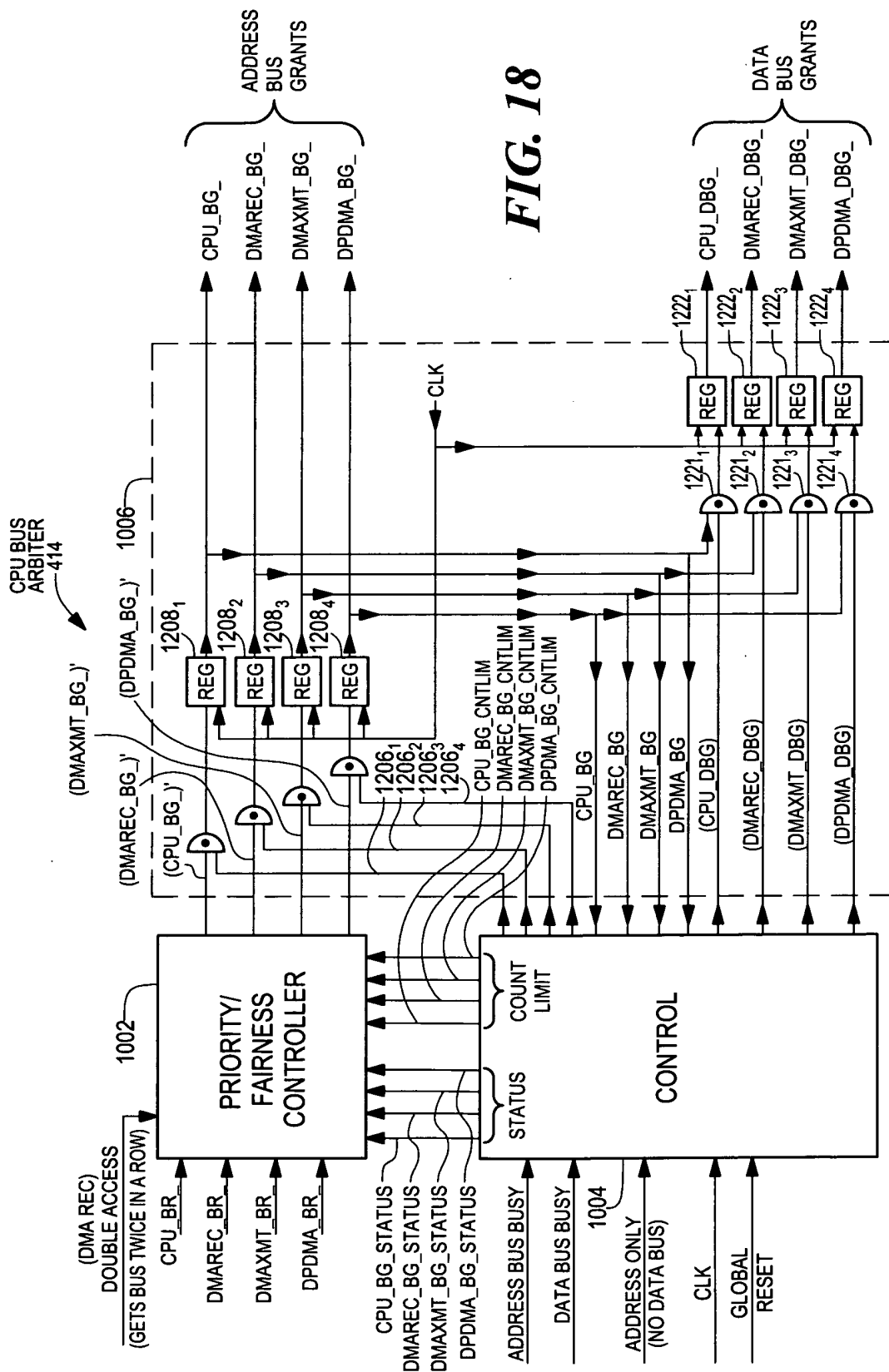
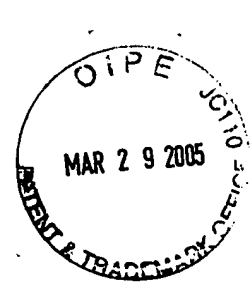


FIG. 17





POTENTIAL GRANT TO	CPU _BR_	DMAREC_ _BR_	DMA_XMT_ _BR_	DPDMA_ _BR_	CPU_BG_ STATUS	DMAREC_BG_ STATUS	DMA_XMT_BG_ STATUS	DPDMA_BG_ STATUS	CPU_BG_ CNTLIM	DMAREC_BG_ CNTLIM	DMA_XMT_BG_ CNTLIM	DPDMA_BG_ CNTLIM	DOUBLE ACCESS
(CPU_BG)	DC	0	0	0	DC	DC	DC	DC	DC	DC	DC	DC	DC
(CPU_BG)	1	DC	DC	DC	0	DC	DC	DC	DC	0	0	0	0
(CPU_BG)	1	DC	DC	DC	DC	DC	DC	DC	1	DC	DC	DC	0
(DMAREC_BG)	0	1	0	0	DC	DC	DC	DC	DC	DC	DC	DC	DC
(DMAREC_BG)	DC	1	DC	DC	DC	1	DC	DC	DC	DC	DC	0	1
(DMAREC_BG)	0	1	DC	DC	DC	0	DC	DC	DC	DC	0	0	DC
(DMAREC_BG)	1	1	DC	DC	1	DC	DC	DC	0	DC	0	0	DC
(DMAREC_BG)	DC	1	DC	DC	DC	DC	DC	DC	0	1	DC	DC	DC
(DMA_XMT_BG)	0	0	1	0	DC	DC	DC	DC	DC	DC	DC	DC	DC
(DMA_XMT_BG)	0	0	1	DC	DC	DC	0	DC	DC	DC	DC	0	DC
(DMA_XMT_BG)	0	1	1	DC	DC	1	DC	DC	DC	DC	DC	0	0
(DMA_XMT_BG)	1	0	1	DC	1	DC	DC	DC	DC	DC	DC	0	DC
(DMA_XMT_BG)	DC	DC	1	DC	DC	DC	DC	DC	0	0	1	DC	0
(DPDMA_BG)	0	0	0	1	DC	DC	DC	DC	DC	DC	DC	DC	DC
(DPDMA_BG)	0	0	1	1	DC	DC	1	0	DC	DC	DC	DC	DC
(DPDMA_BG)	0	1	0	1	DC	1	DC	DC	DC	DC	DC	DC	0
(DPDMA_BG)	1	0	0	1	1	DC	DC	DC	DC	DC	DC	DC	DC
(DPDMA_BG)	DC	DC	DC	1	DC	DC	DC	DC	0	0	0	1	0

FIG. 19

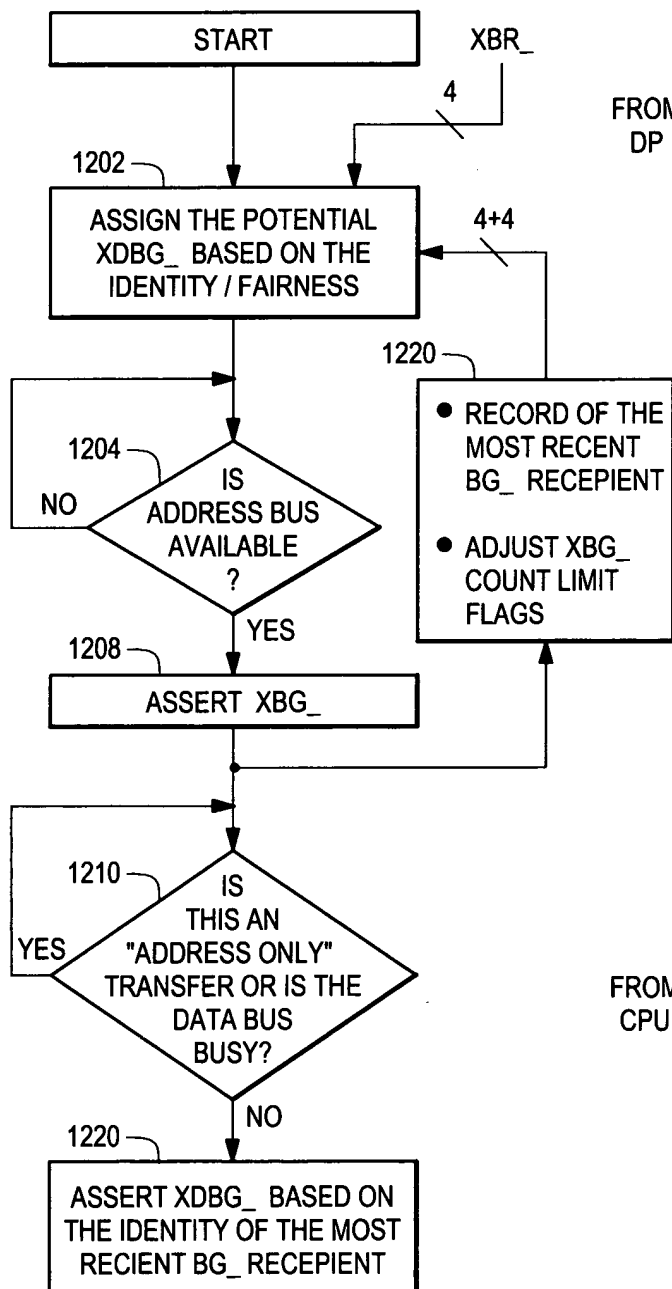


FIG. 20

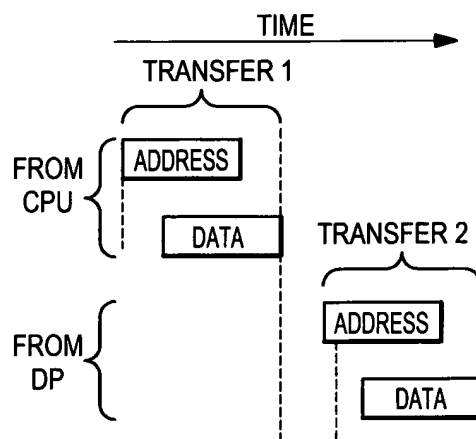


FIG. 21A

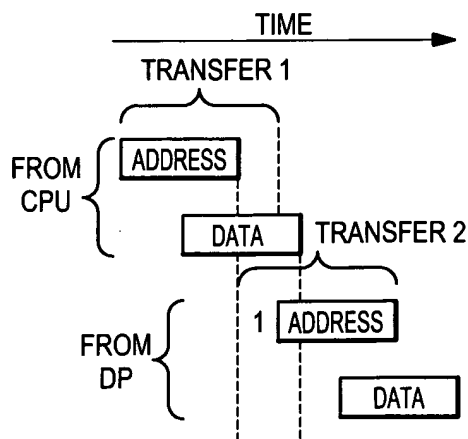


FIG. 21B

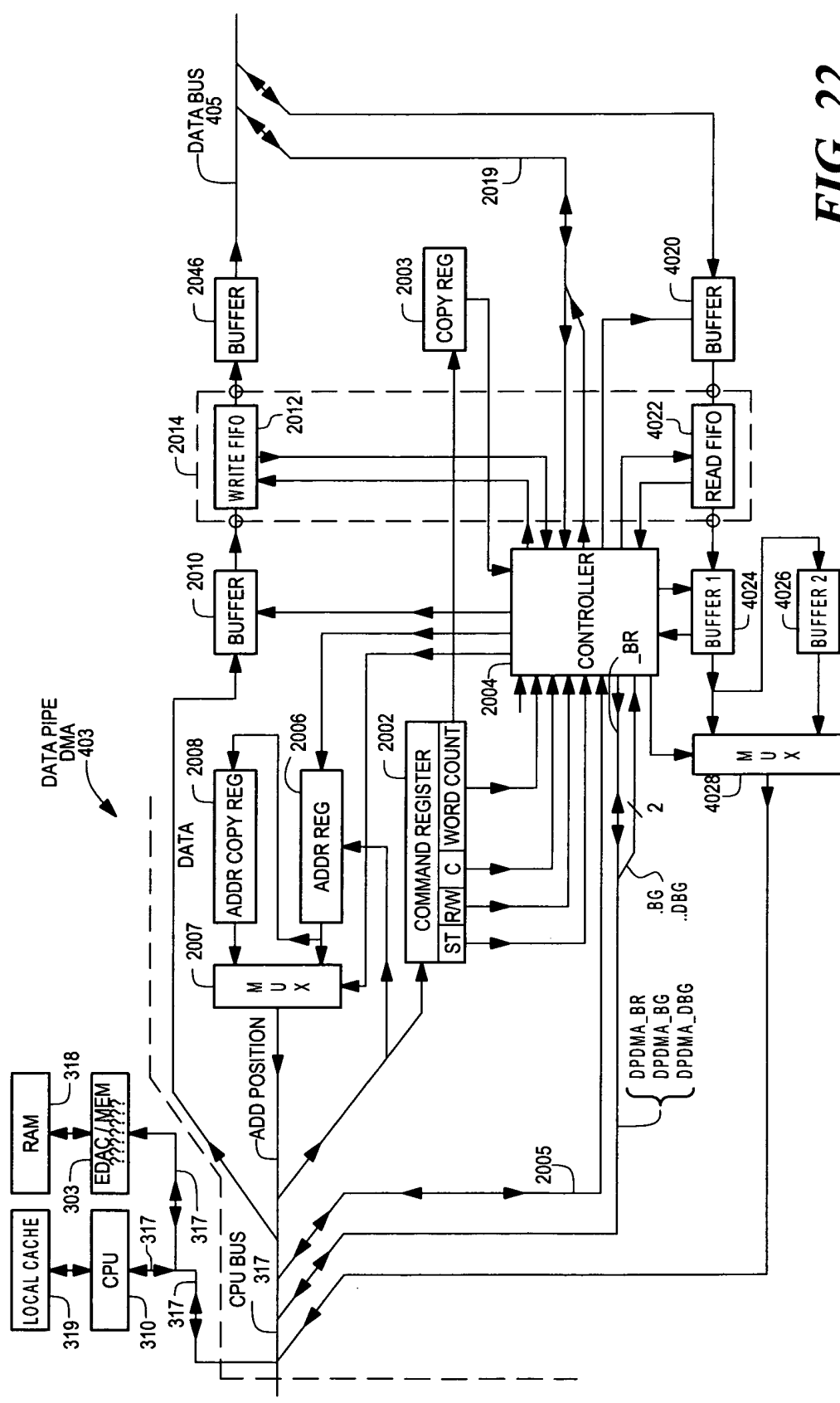
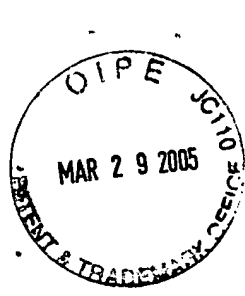


FIG. 22